



The Impact of Visual Merchandising on Impulse Purchases and Biological Aspects in Customer Loyalty Intentions: A Focus on Pothys - Tiruchirappalli

S. Syed Muthaliff^{1*} and Dr. S. Dhinesh Babu²

¹Ph.D. Research Scholar, Department of Business Administration, Government arts college, (Affiliated to Alagappa University – Karaikudi) Paramakudi (Tamil Nadu), India.

²Research Supervisor, Head of the Department, Department of Business Administration, Government Arts College, (Affiliated to Alagappa University – Karaikudi) Paramakudi (Tamil Nadu), India.

(Corresponding author: S. Syed Muthaliff*)

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ABSTRACT: Visual merchandising started as a method to create visual appeal. It incorporates elements such as color, lighting, spatial layout, products, informational cues, and sensory experiences like scent, touch, and sound, along with technologies like displays and interactive installations, to design engaging presentations. The practice involves the strategic arrangement and presentation of products and services to boost sales. It is vital in forming a positive perception among customers.

The sample size was calculated using a 95% confidence level, a 5% margin of error, and a 50% population proportion, yielding a final figure of 385. From this total, a representative 50%, equating to 193 individuals, participated in the survey. Before conducting the main survey, the questionnaire was pilot tested with 15 individuals to ensure its validity. The analysis was ultimately based on the responses from the 193 participants included in the final sample size.

IBM SPSS Statistics version 20.0 was utilized for the analysis, employing the following tools: 1) Reliability Test, 2) Factor Analysis, 3) Multiple Regression, and 4) SEM Model.

The reliability test yielded a Cronbach's alpha value of 0.941, indicating satisfactory reliability of the data. Factor analysis was conducted to verify the appropriateness of the chosen factors for the study, while multiple regression was used to determine the percentage effects. The results also demonstrate a strong correlation between impulse buying behavior and customer patronage intention toward the product purchase.

Keywords: Visual Merchandising, Impulsive Buying, Customer Patronage, Promotional signage, Design & layout of the store, Corporate identity, Merchandise display, Lightning.

INTRODUCTION

Visual merchandising focuses on displaying products in retail environments, highlighting visual elements to capture consumer interest. It involves the artful presentation of merchandise; ensuring items are color-coordinated, accessorized, and easily understandable. An inviting atmosphere not only attracts customers into the store but also encourages them to linger.

The significance of visual merchandising in branded apparel stores. The main objective of visual merchandising is to attract customers to a business location with the aim of selling merchandise. Known as the "Silent Salesman," visual merchandising is a widely used strategy to increase foot traffic, attract shoppers, and improve the overall shopping experience. This is achieved by creating an environment that not only grabs customers' attention but also maintains their interest,

stimulates desire, and ultimately enhances the sales process.

Tools used for visual merchandise. Some of the commonly used techniques are:

- Promotional signage
- Design & layout of the store
- Corporate identity
- Merchandise display
- Lightning

Statement of the problem. As competition grows fiercer, retailers encounter difficulties in sustaining their stores' appeal to their intended audiences. Differentiating based solely on merchandise becomes more challenging. Recognizing the store's role in market differentiation is crucial for retailers. This study aims to provide insights to retailers on different types of visual merchandising that can influence consumers'

impulse buying behaviors and their intentions for customer loyalty.

Research Gap. Previous research has focused on examining the influence of visual merchandising, including its effects on consumer purchasing behavior and impulse buying. This study aims to investigate whether visual merchandising contributes to impulse buying and encourages repeat patronage among customers.

REVIEW OF LITERATURE

As research on visual merchandising and store atmospherics continues to converge, this systematic literature review aims to identify the research gaps and overlaps to help researchers with directions on formulating original research ideas in this cross-over domain. A framework-based review using Theory, Context, Characteristics, and Methods (TCCM) typology with an integrated analysis of 88 research articles published between 2000 and 2020 was carried out. It was found that visual merchandising as a product-driven display function has been closely related to store atmosphere as a store-wide display function. Hence an integrated framework of research in visual merchandising and store atmospherics becomes imperative to understand their interplay in the evolving scope of traditional and e-tailers' environments. The paper contributes as the first and most comprehensive review of research on visual merchandising with the closely substitutable domain- store atmospherics (Basu *et al.*, 2022).

Visual merchandising has been over the years thought to be marketing tool in retail industries. The researchers embarked upon a study to find the impact of visual merchandising with reference to the retail sector. For this they have taken the reliance trends as a case and has done an in depth study using its sample customers to find the impact of their buying behavior. The research was of a descriptive in nature and helped to develop the concept to clearly establish priorities, to divulge adequate information which the researchers feel will help in decision making for the company. A structured questionnaire was used to obtain information and to assess the impact of visual merchandising, on impulse buying behavior of customers. A random sampling technique was used in the study and care was taken that the respondents were as diversified as possible. A sample size of 100 respondents was taken from Cochin and Kottayam. To draw conclusions easily, the data was converted into XY (Scatter) diagrams. Research findings suggest that impulse buying accounts for substantial sales across a broad range of product categories in the stores. Since impulse buying is a pervasive aspect of consumers' behaviors and a focal point for strategic marketing plans, it is worthwhile for retailers to understand factors within the retail setting that trigger consumers' impulsive reactions (Thomas *et al.*, 2018).

The objectives of this study are to analyse the effect of visual merchandising factors on shopping enjoyment and to examine the effect of shopping enjoyment on consumer impulse buying behaviour of Next Generation Clothing Stores in Yangon. There are twelve branches of Next Generation clothing stores in Yangon. Raosoft's formula was used to calculate the sample size as the population was unknown. The sample size was 267 customers who were asked a structured questionnaire by using systematic random sampling method. Every fifth customers who came to buy the products to stores during working hours were selected to conduct the survey. 193 out of 267 customers responded complete answers to analyze the primary data. Descriptive method and regression method were used in this study. According to the regression analysis, the findings show that among four variables of visual merchandising, store layout and promotional signage have positive effects on shopping enjoyment. It is also found that the shopping enjoyment has a significant effect on consumer impulse buying behaviors of Next Generation clothing stores in Yangon (Jhawar and Kushwaha 2017).

Consumer behavior undergoes a very dynamic and significant development, which is caused by various factors. Consumer behavior is related to the factors behind the interest and decision to buy. This study aims to determine the effect of visual merchandising, store atmosphere, and sales promotion on impulse buying behavior. The method used in this research is quantitative. The sample used is supermarket consumers in Demak. The sampling technique used purposive sampling. The data analysis technique used multiple linear regression. The results showed that visual merchandising had a significant effect on impulsive buying behavior, store atmosphere has a considerable impact on impulsive buying behavior, and sales promotion significantly affected impulsive buying behavior. Therefore, in the future, if you want to optimize buyer interest, these three factors need to be considered (Nurudin, 2020).

The principal objectives of this project were to investigate the effect of visual merchandising on customer impulse buying behavior in retail stores in Sudan. This study employed descriptive method, using the convenience sampling technique of non-probability sampling method. 168 questionnaire were administered to shoppers in Alanfal mall to examine the various factors of visual merchandising and its influence on consumers' impulse buying behavior. The Pearson correlation test is used to check the correlations between impulse buying tendency and each of the four types of visual merchandising practices and multiple regression analysis was conducted for hypothesis testing to find out the relationships between impulse buying tendency and each of the four types of visual merchandising practices. The findings indicated that there was a positive relationship between visual

merchandising and consumers' impulse buying behavior. Moreover, the study revealed that the strongest correlation exist between impulse buying behavior and window display next to floor merchandising followed by In store form and Promotional signage. The findings are useful for retailers to choose an appropriate technique in presenting merchandise in the most attractive manner to catch the eyes of the customer to convert them into buyers of the products (Adam, 2020).

The importance of visual merchandising has been ignored in India but since the last few years it is catching the fancies of youth and is helping merchandisers jump the hurdle of getting the customers in their stores. The culture of shopping in malls and complexes is growing in leaps and bounds in Punjab and no research has been conducted on the effects of visual merchandizing on the impulse buying by consumers in apparels in my knowledge. The previous research in this area has been restricted outside India and has been untouched especially in Punjab. This research aims to address the peculiar dilemma faced by merchandisers for proper utilization of visual cues that are directed towards the customers to attract them to their stores, resulting in purchase of apparels. Since impulse buying is a pervasive aspect of consumers' behaviors and a focal point for strategic marketing plan (Rook, 1987), finding variables that influence shoppers' impulse buying urges and decisions and attempting to control these influencing variables through strategic marketing and merchandising activity is critical for retailers in order to survive in fierce competition (Randhawa and Saluja 2017).

The study attempted to investigate some external factors that influence impulse buying behavior. This study attempted to explain the relationship between respondents' impulse buying behavior and various types of visual merchandising. The previous research in this area has been restricted outside India and has been untouched especially in Punjab. This research aims to address the peculiar dilemma faced by merchandisers for proper utilization of visual cues that are directed towards the customers to attract them to their stores, resulting in purchase of apparels. An important finding of this study was that visual merchandising practices certainly influence respondents' impulse buying behavior. The results proved that there were significant relationships between respondents' impulse buying behavior and window display and in-store/mannequin display (Randhawa and Saluja 2017).

Consumers' perceptions of visual merchandising can arouse consumers' in-store merchandise exploration, such as interacting with products, differentiate a retail brand among competitors; contribute to brand preference; and encourage purchase intentions. However, the combination of topics, visual merchandising and cognition, remains relatively unexplored. Thus, Study I develops measures of visual

merchandising cognition and Study II examines the impact of visual merchandising cognition on brand preference, with a focus on fashion brands. This research used mixed methods and an experimental design to empirically test the influence of visual merchandising cognition on fashion brand preferences. Confirmatory factor analysis finds three dimensions of visual merchandising cognition: *in-fashion*, *attractiveness*, and *function*. A structural equation model confirms a conceptual framework for the influence of visual merchandising cognition on brand preferences. *In-fashion* and *attractiveness* have a significantly positive effect on brand aesthetic attributes. *Function* has a significantly positive effect on brand utilitarian attributes. Favorable attitudes toward visual merchandising directly transfer to favorable brand attitudes that are positively associated with purchase intentions (Park *et al.*, 2015).

The art of visual displays and the arrangement of merchandising solutions in a shop is virtual merchandising, which improves layout and design, increases development, sales and thereby profitability. Visual merchandising affects the shopping experience directly, making it relevant for retailers to ensure an efficient nature of their business climate. The main aspiration of this study is to figure out the visual merchandising elements which influence on an individual's purchase intention. A sample of 356 respondents available at different fashion stores in Malaysia was used to get the study outcomes following the quantitative analysis. The Smart PLS 3.0 was used for analysing the data. This study claims that there is a positive and significant relationship between store layout and consumer's intention to purchase. Then, a positive and significant relationship is also found between product display and consumer's intention to purchase. Furthermore, a positive and significant relationship is found between colour & lighting and consumer's intention to purchase. Moreover, a positive and significant relationship is not found between cleanliness and consumer's intention to purchase. The outcomes of this study will help the policy makers, government and entrepreneurs to make their fashion stores gorgeous. This study would enable fashion retailers to build more insightful, engaging online shops, which will then boost retail sales online (Mondol *et al.*, 2021).

Biological sex is a demographic variable whose effect has been examined in consumer researches for many years. However, the effect of gender identity, defined as the existential femininity or masculinity of individuals, has started to be examined in consumer researches since the 1960s. In the literature, there are studies investigating the effect of biological sex on consumers' impulse buying behavior. However, studies investigating the effect of gender identity on consumers' impulse buying behavior and whether this effect differs in terms of biological sex are quite

limited. The aim of this study is to investigate the effect of gender identity on the consumers' impulse buying behavior and whether the effect of gender identity on the consumers' impulse buying behavior differs in terms of biological sex as a moderator variable. Research data were collected from consumers in Bursa via face to face survey method. The data obtained were evaluated by structural equation modeling to determine the effect of gender identity on impulse buying behavior. As a result of the analysis, it was found that feminine gender identity positively affected impulse buying behavior, whereas masculine gender identity did not affect impulse buying behavior. In the research, biological sex was also analyzed. As a result of the analysis, it was found that according to females, the feminine and masculine gender identity were not effective on impulse buying behavior. In addition, it was found that according to males, feminine gender identity was effective on the impulse buying behavior and masculine gender identity was not effective on impulse buying behavior (Ozdemir and Akcay 2019).

The Purchase intention of private label products in Indonesia is below 10%, so it takes effort to build the purchase intention of private label products. Factors that can affect the purchase intention of private label products are visual merchandising and customer value. This study aims to develop propositions about visual merchandising, customer value and purchase intention of private label products. This research method used an article literature review by elaborating on several previous studies that have been published in Google scholar and indexed by Scopus. The results showed there was a proposition between visual merchandising, customer value and purchase intention, where visual merchandising produced customer value, customer value formed the purchase intention, and visual merchandising encouraged buying intention (Maharani *et al.*, 2020).

This study aims to examine the role of environmentally induced stimulation in influencing impulse buying. In addition, the authors seek to investigate the impact of two situational factors (availability of time and money) on impulse buying. The present research empirically tests a theoretical model of impulse buying by examining the associations between impulse buying and environment of store, visual merchandising, promotions, impulse buying tendency (IBT), examination goods and availability of time and money. A total of 329 customer surveys were collected and these were analyzed using partial least squares (PLS). Findings show that promotion environment of store and examination of goods have most related with impulse buying behavior. On other hand, results prove that there is not significant relationship between customers' impulse buying behaviors and two situational factors (availability of time and money) and visual merchandising. This study provides insights to retailers about types of environment of store that can influence

consumers' impulse buying behaviors (Maymand and Ahmadijad 2011).

India's overall retail sector is expected to increase at an unprecedented Compound annual Growth Rate (CAGR) of 10 percent by the year 2025 from US\$ 672 billion in 2017. The life-style format of apparel segment in retail industry has been experiencing higher growth even though intensive competitive environment has been prevailing due to presence of a large number of marketers. The customers are constantly offered newer varieties of merchandise by the modern retailers for creating customers' interest. The retailers are adopting attractive store design as well as retail layout using visual practices of merchandising *viz.*, attractive packaging, eye-catching displays, and appropriate place for promotional signages within the store. Visual merchandising now is considered important in strategic marketing decisions to increase the footfalls and sales of the stores. This empirical research study examines the influences of selected dimensions of visual merchandising in the city of Vadodara on impulse buying behavior. Influence of four dimensions of visual merchandising on impulse buying behavior *viz.*, window display, in-store form/mannequin display, floor merchandising and promotional signage have been considered in this research study due to their strategic importance in marketing decisions to increase the footfalls and sales of the stores in the Vadodara city of the Gujarat State (Shukla *et al.*, 2018).

The purpose of the present study was to understand the role of sustainable visual merchandising practices in predicting retail store loyalty. Stimulus–Organism–Response model framework was used along with extant literature to support the proposed hypotheses. An online survey was administered to collect the data from a convenience sample of students in a large public university in the United States. A total of 737 useable surveys were collected. A variety of statistical analysis was conducted. Structural equation modelling was used to test the hypotheses. Based on standardised path coefficients and significance levels, attitude toward sustainable visual merchandising practices positively influenced both (H1) willingness to buy and (H2) patronage intention. The relationship between willingness to buy and store loyalty (H3) was non-significant. Patronage intention (H4) positively influenced the store loyalty. In total, the hypothesised model explained 60% of variance in store loyalty. Theoretical and managerial implications are discussed (Sadachar *et al.*, 2022).

Purpose of the study. This study aims to examine how Visual Merchandising influences both Impulse Buying and Customer Patronage Intention, with a specific focus on Reliance Digital - Tiruchirappalli. The research will also explore external factors typically found in diverse retail environments that relate to visual merchandising.

Objectives of the Study:

To examine the influence of Visual Merchandising on Impulse Buying and Customer Patronage Intention, focusing on Reliance Digital - Tiruchirappalli.

To identify factors influencing the impact of Visual Merchandising on Impulse Buying and Customer Patronage Intention, specifically at Reliance Digital - Tiruchirappalli.

To investigate the relationship between dimensions of Visual Merchandising and impulsive apparel purchases.

To propose strategies for enhancing Visual Merchandising in apparel retail stores and recommend measures to improve Customer Patronage Intentions in these stores.

Hypotheses

— Relationship between Retail Visual Merchandising methods and Impulse Buying.

— Relationship between Impulse Buying and Customer Patronage Intentions.

MATERIALS AND METHODS

To meet the objectives, the research framework utilizes a descriptive approach, employing questionnaires for primary data collection. The research design includes a cross-sectional study where respondents are surveyed using a structured questionnaire. Data was gathered from primary sources through structured questionnaires, and secondary sources included diaries, newspapers, national and international publications, the internet, books, and libraries.

Sample Size. The sample size of 193 respondents for questionnaire analysis was determined with a 95% confidence level, a 5% margin of error, and assuming a population proportion of 50%. This was calculated from an initial total of 385, with half of that figure being used. To ensure the validity of the survey instrument, a pilot test was conducted with a sample of 15 individuals. Ultimately, the final sample size used for analysis remained at 193.

Sample Elements. The sample will consist of individuals who visit and purchase items at Reliance Digital - Tiruchirappalli.

Sampling Technique. Simple random sampling was used to initially select respondents. The first participants were chosen using this method. Additional participants were then added based on referrals from the initial sample units. This process continued, gradually expanding the sample by incorporating more respondents referred by those initially selected, until the predetermined sample size was reached.

Statistical Tool. Using IBM SPSS Statistic version 20.0 the following tools were administered in this study 1) Reliability; Test 2); Factor Analysis 3) Multiple Regression.

1. Reliability Test:

To evaluate the reliability and consistency of the data, a reliability test was performed, resulting in a Cronbach's alpha coefficient of 0.941. This value indicates a high level of reliability, as Cronbach's alpha values above 0.5 are generally considered satisfactory measures of reliability.

Table 1: Reliability Statistics.

Reliability Statistics	
Cronbach's Alpha	No. of Items
.941	25

2. Factor Analysis:

Table 2: KMO and Bartlett's Test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.826
Bartlett's Test of Sphericity	Approx. Chi-Square	2.4634
	Df	861
	Sig.	.000

Inference: The KMO test assesses the suitability of factor analysis. A value between 0.5 and 1.0 indicates appropriateness, and in this case, the obtained value of 0.826 indicates that the Kaiser-Meyer-Olkin measure of sampling adequacy is suitable. Bartlett's Test of Sphericity is employed to test the hypothesis through

the correlation of variables in Chi-Square and the correlation matrix of determinants. The Chi-Square value obtained in Bartlett's Test of Sphericity is 2.4634, indicating a correlation among all statements and confirming the appropriateness of factor analysis for the study.

Table 3: Rotated Component Matrix^a.

	Component										
	1	2	3	4	5	6	7	8	9	10	11
Clearance or instant offer signs attract me to browse through the clothing.	.065	.035	.047	-.016	-.037	.111	.068	.770	.041	.157	-.041
If there's a special promotion sign, I am inclined to check out the clothing.	-.006	.015	.140	.176	-.094	.215	.772	.048	.038	.085	-.084
I am more likely to make an unplanned purchase if there is a sale or clearance sign on the clothing.	.358	.404	.741	.047	.128	-.053	.618	-.004	.118	.046	.137
When I see an appealing promotional offer on in-store signs, I feel compelled to make a purchase	.203	.207	.016	.051	.221	.065	.628	.207	-.021	.209	.192
The presentation of merchandise is creatively and uniquely done	-.196	.368	.164	.099	.206	.009	.152	.606	.059	.112	.119
The design and layout of the store significantly influence my overall shopping experience	.051	.717	.193	-.015	.106	.098	.217	.034	.231	.258	.059
It is easy for me to quickly find the product I want.	.269	.769	-.045	.051	.158	.061	.021	.074	-.049	.060	-.007
I prefer shopping in retail stores with sufficient floor space to move around	.232	.556	.262	-.196	.074	.167	.185	.158	.077	.203	.051
The store's logo or symbol is easily recognizable to me	.160	.452	-.070	.068	.512	.042	.326	.187	.156	.037	.118
The employees are consistent in their customer service and assistance.	.645	.165	.035	.056	.301	.009	.059	.242	.066	.602	.147
The corporate color palette used by this store is eye-catching and captures my attention	.340	.318	.309	.071	.352	.736	-.092	.026	-.006	-.018	.305
The store's advertisements maintain a consistent look and feel.	.251	.141	.069	.110	.205	.177	.056	-.025	.128	.136	.781
The store offers a good variety of merchandise.	-.004	.039	.131	.267	.193	.123	-.040	.521	.394	-.182	.013
Shelf displays or racks are attractive	.133	.104	.218	.263	.127	-.033	-.018	.077	.742	.072	.024
The arrangement of merchandise is appealing.	.763	-.045	.132	-.073	-.034	.157	.059	-.021	.126	.186	-.022
The brands displayed are organized in a logical sequence	.331	-.068	.303	-.028	.281	.475	.213	.090	.088	.149	.372
Merchandise is neatly organized	.328	.285	.335	.035	.372	.368	.164	-.173	.344	-.094	-.184
Lighting creates a pleasant ambiance and visually appealing environment	.287	.261	.440	.233	.432	.226	.050	.131	.000	-.007	.179
I always notice items that are well-lit.	.081	.076	.100	.803	.090	.188	.146	.052	.193	.005	.024

Different levels of lighting intensity stimulate my preference for certain products.	-.115	-.021	.335	.656	.061	.081	-.034	-.181	.171	.104	.208
Colors and lighting are important in supermarkets	.635	.069	.051	.187	.223	.343	.217	-.103	-.112	-.081	-.005
shopper's eye is drawn A shopper's attention is naturally drawn to the brightest item or area	.111	.088	.046	.079	.742	-.058	.026	.047	.139	.231	.114
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization											
. a. Rotation converged in 11 iterations											

The factors are:

➤ **FACTOR 1:**

The arrangement of merchandise is appealing.

➤ **FACTOR 2:**

It is easy for me to quickly find the product I want.

➤ **FACTOR 3:**

I am more likely to make an unplanned purchase if there is a sale or clearance sign on the clothing.

➤ **FACTOR 4:**

I always notice items that are well-lit.

➤ **FACTOR 5:**

Shopper's eye is drawn A shopper's attention is naturally drawn to the brightest item or area.

➤ **FACTOR 6:**

Corporate Color Palette used by this store is catchy and grabs my attention

➤ **FACTOR 7:**

The corporate color palette used by this store is eye-catching and captures my attention.

➤ **FACTOR 8:**

Clearance or instant offer signs attract me to browse through the clothing.

➤ **FACTOR 9:**

Shelf displays or racks are attractive

➤ **FACTOR 10:**

The employees are consistent in their customer service and assistance.

➤ **FACTOR 11:**

The store's advertisements maintain a consistent look and feel.

INFERENCE:

Eleven values collectively represent the unique variations explained by each factor. The degree of overall change is detailed for each factor. Exploratory factor analysis, a method that validates principal component analysis, is used for this purpose. This process assesses the total variance in the data to determine the minimum number of factors needed to capture the maximum data variability.

3. Multiple Regression:

Hypotheses 1: There is no relationship between Retail Visual Merchandising methods and Impulse Buying.

Table 4.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613 ^a	.575	.508	.57155

a. Predictors: (Constant), The arrangement of merchandise is appealing, It is easy for me to quickly find the product I want, I am more likely to make an unplanned purchase if there is a sale or clearance sign on the clothing, I always notice items that are well-lit, Shopper's eye is drawn A shopper's attention is naturally drawn to the brightest item or area, Corporate Color Palette used by this store is catchy and grabs my attention, The corporate color palette used by this store is eye-catching and captures my attention, Clearance or instant offer signs attract me to browse through the clothing, Shelf displays or racks are attractive, The employees are consistent in their customer service and assistance, The store's advertisements maintain a consistent look and feel.

INFERENCE:

The summary of the model reveals an R value of 0.613, indicating that 61.3% of the variation in impulsive apparel purchases attributed to Visual Merchandising can be explained by the 11 independent variables

Table 5: ANOVA (b).

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.063	10	1.806	5.529	.000 ^a
	Residual	30.054	92	.327		

	Total	48.117	102		
a. Predictors: (Constant), The arrangement of merchandise is appealing, It is easy for me to quickly find the product I want, I am more likely to make an unplanned purchase if there is a sale or clearance sign on the clothing, I always notice items that are well-lit, Shopper's eye is drawn A shopper's attention is naturally drawn to the brightest item or area, Corporate Color Palette used by this store is catchy and grabs my attention, The corporate color palette used by this store is eye-catching and captures my attention, Clearance or instant offer signs attract me to browse through the clothing, Shelf displays or racks are attractive, The employees are consistent in their customer service and assistance, The store's advertisements maintain a consistent look and feel.					
b. Dependent Variable: Impulse Buying					

INFERENCE:

The ANOVA Table 5 presented above includes the F value, which helps identify the relationship between dependent and independent variables. A higher F value indicates larger variances. Specifically, the F-ratio recorded in the Table 5 is 5.529, accompanied by a significance (sig.) value of 0.000. Since the p-value is

below 0.05, it indicates that the regression coefficient is statistically significant, suggesting that changes in the independent variable significantly affect the observed changes in the dependent variable. Thus, it can be concluded that variations in predictors (constant variables) indeed contribute to influencing Consumer Buying Behavior in Online Shopping.

Table 6: Coefficients (a).

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
(Constant)	.544	.640		.849	.398	
1 Clearance or instant offer signs attract me to browse through the clothing.	-.006	.062	.119	-.099	.002	
If there's a special promotion sign, I am inclined to check out the clothing.	.205	.079	.232	2.609	.001	
I am more likely to make an unplanned purchase if there is a sale or clearance sign on the clothing.	.048	.079	.054	.604	.005	
When I see an appealing promotional offer on in-store signs, I feel compelled to make a purchase	.094	.079	.112	1.184	.004	
The presentation of merchandise is creatively and uniquely done	.020	.094	.019	.211	.004	
The design and layout of the store significantly influence my overall shopping experience	.248	.094	.259	2.638	.000	
It is easy for me to quickly find the product I want.	.069	.080	.076	.861	.002	
I prefer shopping in retail stores with sufficient floor space to move around	.350	.091	.333	3.854	.000	
The store's logo or symbol is easily recognizable to me	-.066	.101	-.063	-.651	.001	
The employees are consistent in their customer service and assistance.	.432	.090	.454	.991	.000	
The corporate color palette used by this store is eye-catching and captures my attention	-.067	.083	-.077	-.809	.001	

a. Dependent Variable: Impulse Buying

INFERENCE:

The Table 6 above indicates that various factors influence shopping behavior significantly. For instance, an appealing merchandise arrangement, with a beta coefficient of .232, shows statistical significance at a p-

value of .002. The ability to quickly locate desired products, also reflected by a beta score of .232, is significant at a p-value of .001. Furthermore, the presence of sale or clearance signs increases the likelihood of unplanned purchases, with a beta score of

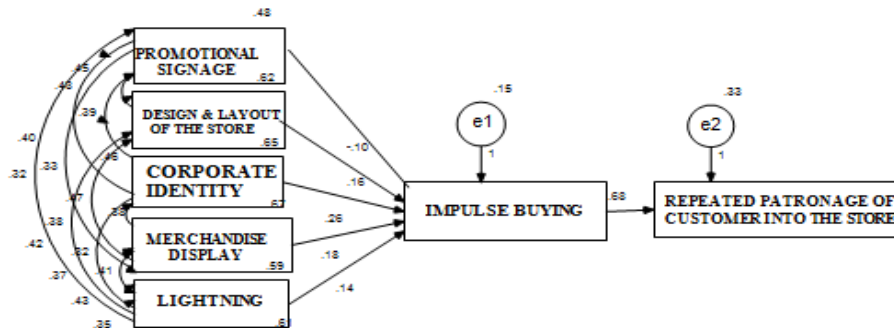
.054, significant at a p-value of .005. Additionally, attention to items under strong lighting, indicated by a beta score of .112, is significant at a p-value of .004. Shoppers are naturally drawn to brighter items or areas, supported by a beta score of .019, significant at a p-value of .004.

Moreover, the use of a catchy corporate color palette by the store, reflected in a beta score of .259, is significant at a p-value of .000. Special promotion signs encourage exploration of relevant clothing, with a beta score of .076, significant at a p-value of .002. Similarly, enticing stock clearance or instant offers signage prompts

browsing for clothing, with a beta score of .333, significant at a p-value of .000. Despite a negative beta score of -.063, attractive shelf displays or racks are significant at a p-value of .001. Employees' unified customer assistance, indicated by a beta score of .454, is significant at a p-value of .000. Finally, the store's consistent advertising aesthetic, reflected in a beta score of -.077, is significant at a p-value of .001.

Conceptual frame work model

Impact of Visual Merchandising on Impulsive Purchase of Apparel



H0: The model is good fit

Test for Model Fit	Values
Chi-square (Probability value)	0.000
RMSR (Root Mean Square Residual)	0.047
GFI (Goodness of Fit)	0.856
AGFI(Adjusted Goodness of Fit)	0.966
CFI (Comparative Fit Index)	0.855
NFI (Normal Fit Index)	0.854

INFERENCE:

The model's assumptions underwent statistical validation using appropriate tests like the chi-square, with a required probability value less than 0.05. In this instance, the level of significance is 0.000, indicating a robust fit for the model. The Root Mean Square Residual (RMSR) is the square root of the average squared difference between sample variances and covariances from their estimates. For a satisfactory fit, the residual value should be below the 0.050 significance level. In our model, the RMSR is 0.047, affirming its suitability. To evaluate model fit, the Goodness of Fit (GFI) should exceed 0.9. Here, the GFI value is 0.859, approaching 0.9, suggesting the model is reasonably fitting. Similarly, the Adjusted Goodness of Fit Index (AGFI) should surpass 0.9. In this model, the AGFI value is 0.910, indicating a good fit. For a good fit, the Comparative Fit Index (CFI) is expected to be above 0.9. In our model, the CFI value is 0.873, close to 0.9, suggesting the model fits well. Likewise, the Normal Fit Index (NFI) should exceed 0.9. In the current model, the NFI value is 0.872, nearing 0.9, indicating a good fit for the model.

Findings, Suggestions And Conclusion:

Findings:

Multiple Regression. The model summary reveals an R value of 0.613, indicating the percentage variation in impulsive apparel purchases attributed to Visual Merchandising.

In the Model Summary, the F-ratio listed under the F column is 5.529, with a corresponding p-value of 0.000 in the significance (sig.) column. This p-value being less than 0.05 signifies the significance of the regression coefficient.

In the Coefficient section, the B column value for the Constant is denoted as the a-value (0.544), while for Advertisement features, it is represented by the b-value (0.922).

SEM (Structural Equation Modelling). The model's assumptions underwent statistical validation using appropriate tests like the chi-square, with a required probability value less than 0.05. In this instance, the level of significance is 0.000, indicating a robust fit for the model. The Root Mean Square Residual (RMSR) is the square root of the average squared difference between sample variances and covariances from their estimates. For a satisfactory fit, the residual value should be below the 0.050 significance level. In our model, the RMSR is 0.047, affirming its suitability. To evaluate model fit, the Goodness of Fit (GFI) should

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Suggestions:

1. A well-designed store layout that places popular or seasonal products in key spots can encourage impulse buying. At Pothys, displaying trendy or festival clothing in busy areas can be effective.
2. Attractive, well-organized displays, like mannequins wearing matching outfits or sections grouped by color, can appeal to emotions, leading to spontaneous purchases.
3. Using lighting to spotlight certain products can catch customers' eyes and make items seem more valuable, increasing the chances of impulse buys.
4. Clear and eye-catching signs that highlight special deals, discounts, or new items can encourage customers to make unplanned purchases.
5. Placing products near the checkout area often results in last-minute impulse buys. Pothys can take advantage of this by displaying small, appealing items like accessories or gifts near the billing counters.
6. Understanding how customers react biologically, such as how certain colors, scents, or textures affect their emotions and decisions, can help create a more engaging and loyalty-building environment.
7. Using pleasant smells, background music, and products that customers can touch can improve the shopping experience, making them more likely to return.
8. Analyze how the use of color in displays and signs influences customers' emotions and decision-making, often leading to impulse purchases.
9. Look into how placing high-margin or trendy items at eye level or near the checkout area encourages last-minute buying decisions.
10. Biological factors, like the release of dopamine during shopping, can be influenced by a positive store environment, leading to greater customer satisfaction and loyalty. Personalized services or loyalty programs can also create emotional connections, encouraging long-term loyalty.
11. Making shopping easier through clear navigation and easy access to products can create a more enjoyable experience, encouraging customers to return.
12. Study how the brain reacts to visual cues, such as attractive displays or special offers, and how these trigger dopamine release, leading to positive feelings towards the brand.

CONCLUSIONS

In conclusion, visual merchandising plays a significant role in driving impulse purchases and shaping customer loyalty intentions at Pothys in Tiruchirappalli. The strategic use of store layouts, color schemes, lighting, and culturally relevant displays not only attracts customers but also triggers emotional and psychological responses that lead to unplanned buying decisions. Additionally, understanding the biological aspects, such as the brain's reaction to visual stimuli and the emotional connections customers form with the store environment, can further enhance the effectiveness of merchandising strategies.

SCOPE FOR FURTHER STUDY

Explore how the cultural aspects unique to Tiruchirappalli shape customer reactions to visual merchandising at Pothys, and how these differ from global trends. Look into the effects of using local cultural symbols, festivals, or traditions in visual merchandising on impulse buying and customer loyalty. Examine how emotional ties to visual merchandising elements, like nostalgia or personal significance, influence impulse buying and long-term loyalty at Pothys. Investigate the specific psychological triggers, such as scarcity or urgency, that Pothys uses in visual merchandising to encourage impulse purchases. Analyze how different age groups and genders react to visual merchandising at Pothys, with a focus on their impulse buying habits and loyalty. Study how eco-friendly store layouts and product displays affect customer behavior and loyalty. Compare Pothys' visual merchandising techniques with those of other top retail stores in Tiruchirappalli to find unique practices that drive impulse buying and customer loyalty.

LIMITATIONS OF THE STUDY

1. Since the study focuses only on Pothys in Tiruchirappalli, the results may not apply to other areas or stores with different cultural or economic situations.
2. Focusing on local cultural factors might not fully reflect how visual merchandising affects customers from different cultural backgrounds, especially those visiting Pothys from outside Tiruchirappalli.
3. It can be difficult to measure emotional and biological responses, like dopamine release or emotional connections to visual merchandising, because these experiences are personal and can vary from person to person.

REFERENCES

- Adam, A. I. (2020). Impact of Visual Merchandising on Customer Impulse buying behavior in retail stores in Sudan. *Asian Journal of Management*, 11(1), 29-37.
- Basu, R., Paul, J., & Singh, K. (2022). Visual merchandising and store atmospherics: An integrated review and future research directions. *Journal of Business Research*, 151, 397-408.

- Jhawar, N., & Kushwaha, V. S. (2017). Visual merchandising and impulse buying behavior with special reference to retail industry. *Asian Journal of Management*, 8(4), 1168-1172.
- Mondol, E. P., Salman, N. A., Rahid, A. O., & Karim, A. M. (2021). The effects of visual merchandising on consumer's willingness to purchase in the fashion retail stores. *International Journal of Academic Research in Business and Social Sciences*, 11(7), 386-401.
- Maharani, N., Helmi, A., Mulyana, A., & Hasan, M. (2020). Purchase intention of private label products as the impact of visual merchandising and customer value. *In 2nd Social and Humaniora Research Symposium (SoRes 2019)* (pp. 461-464). Atlantis Press.
- Maymand, M. M., & Ahmadinejad, M. (2011). Impulse buying: the role of store environmental stimulation and situational factors (An empirical investigation). *African Journal of Business Management*, 5(34), 13057.
- Nurudin, N. (2020). Analysis of the effect of visual merchandising, store atmosphere and sales promotion on impulse buying behavior. *Journal of Digital Marketing and Halal Industry*, 2(2), 167-177.
- Ozdemir, E., & Akcay, G. (2019). The effect of gender identity on consumers' impulse buying behavior and the moderating role of biological sex. *Business and Economics Research Journal*, 10(5), 1109-1125.
- Park, H. H., Jeon, J. O., & Sullivan, P. (2015). How does visual merchandising in fashion retail stores affect consumers' brand attitude and purchase intention? *The International Review of Retail, Distribution and Consumer Research*, 25(1), 87-104.
- Randhawa, K., & Saluja, R. (2017). Does Visual Merchandising have an Effect on Consumer Impulse Buying Behavior? A Study with Special Reference to Apparels in Punjab. *Journal of General Management Research*, 4(2).
- Randhawa, K., & Saluja, R. (2017). Visual merchandising and impulse buying behavior-is there any relationship. *International Journal of Business Quantitative Economics and Applied Management Research*, 4(5), 103-120.
- Shukla, P. S., Vyas, P. H., & Pandya, M. N. (2018). Investigating the Relationship between Visual Merchandising and Impulse Buying of Apparel Products by Selected Retail Shoppers in Vadodara City of Gujarat. *Review of Professional Management*, 16(1), 17-29.
- Sadachar, A., Konika, K., & Chakraborty, S. (2022). The role of sustainable visual merchandising practices in predicting retail store loyalty. *International Journal of Fashion Design, Technology and Education*, 15(3), 257-266.
- Thomas, A., Louise, R., & Vipinkumar, V. P. (2018). Impact of visual merchandising, on impulse buying behavior of retail customers. *International Journal for Research in Applied Science and Engineering Technology*, 6(2), 474-491.

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